

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

Daniel T. Barber et al.

Application No. 09/812,302

Filed: March 20, 2001

PEST CONTROL TECHNIQUES

)  
) Before the Examiner

)  
) Group Art Unit: 2632

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REPLY BRIEF

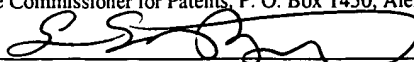
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the Examiner's Answer with a mailing date of 1 October 2004, Appellant hereby provides a Reply Brief per the new patent appeal rules that became effective 13 September 2004. See, 69 Fed. Reg. 49960, 50007 (2004) (to be codified as 37 CFR § 41.41). This Reply Brief is filed in a supplemental form rather than a substitute form, and correspondingly includes selected appeal brief sections described under rule 41.37(c)(1) as indicated to be appropriate for a supplemental reply brief per the Answer to Comment 72 for rule 41.41. See, 69 Fed. Reg. at 49980 (Comment 72 and Answer regarding reply brief content) and 69 Fed. Reg. At 50006 (to be codified as 37 CFR § 41.37). Further, to the extent the modified grounds of rejection asserted in the Examiner's Answer are consider "new grounds of rejection" under rule 41.39(a)(2), it is requested that the present appeal be maintained per rule 41.39(b)(2) with the filing of this Reply Brief. See, 69 Fed. Reg. at 50007 (to be codified as 37 CFR §§ 41.39(a)(2) and 41.39(b)(2)). The Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 23-3030, but not to include issue fees.

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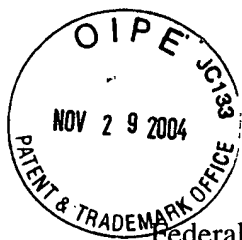
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**TABLE OF CONTENTS**

Table of Contents .....	2
Table of Authorities .....	3
Status of Claims .....	5
Grounds of Rejection To Be Reviewed on Appeal.....	6
Arguments.....	8
A. Claims 1 and 7 Are Novel over Su .....	8
1. Prior Rationale is Maintained .....	8
2. Reply to the Response to Argument in the Examiner's Answer.....	8
B. Dependent Claims 68 Is Nonobvious Over Su.....	9
C. Claims 2-3, 8-10, 12-13, 29-30, 33-34, 56, 59-60, and 69 Are Nonobvious Over Su in View of Zimmermann as Modified in In the Examiner's Answer .....	10
1. The Combination of Su and Zimmermann Is Improper Under §103..	10
2. Additional Reasons Common to Claims 2, 3, 34, 56, 59, and 60 Support Patentability Over the Asserted Su/Zimmermann Combination	13
3. Additional Reasons Support Patentability of Claim 69 Over the Asserted Su/Zimmermann Combination .....	15
4. Additional Reasons Common to Claims 9, 29,30, 33, 34, and 58-60 Support Patentability Over the Asserted Su/Zimmermann Combination	15
5. Additional Reasons Common to Claims 2, 3, 13,and 60 Support Patentability Over the Asserted Su/Zimmermann Combination	16
D. Claims 4-6, 16-20, 22-26, 43-47, 49, 53, 56-58, 62-63, 66-67, and 71-81 Are Nonobvious Over Su in View of Lowe as Modified in the Examiner's Answer.....	17
1. Claim Listing Uncertainty .....	17
2. The Combination of Su and Lowe Is Improper Under §103 as to All the Claims Rejected on These Grounds .....	18
3. Additional Reasons Support Patentability of Claims 4-6 Over the Asserted Su/Lowe Combination.....	19
4. Additional Reasons Support Patentability of Claims 24-26 Over the Asserted Su/Lowe Combination .....	20
5. Additional Reasons Support Patentability of Claims 6, 45, and 58 Over the Asserted Su/Lowe Combination .....	20
6. Additional Reasons Support Patentability of Claim 47 Over the Asserted Su/Lowe Combination.....	21



7. Additional Reasons Support Patentability of Claims 71, 74, and 80 Over the Asserted Su/Lowe Combination .....	22
E. Dependent Claim 31 Is Nonobvious Over Su in View of Lowe and Zimmermann as Modified in the Examiner's Answer.....	23
F. Claims 50-53 and 55 Are Nonobvious Over Su In View of Lowe and Allen as Modified in Examiner's Answer .....	27
Conclusion .....	29
Appendix A.....	30
Appendix B .....	44



## TABLE OF AUTHORITIES

**RECEIVED**  
 DEC 02 2004  
 Technology Center 2600

Federal CasesGraham v. John Deere

383 U.S. 1, 17-18, 148 USPQ 459 (1966) ..... 10, 17, 19

In re Fritch

972 F.2d 1260, 1266, 23 USPQ2d, 1783-84 (Fed. Cir. 1992) ..... 11

In re Robertson

169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)  
 (citing Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991)) ..... 13

Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al.

730 F.2d 1452, 1459, 221 USPQ 481, 486 (Fed. Cir. 1984) ..... 8

W.L. Gore & Associates, Inc. v. Garlock, Inc.

721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983)).....8

Board of Patent Appeals and Interferences DecisionsEx parte Levy

17 USPQ2d 1461, 1464 (U.S. Pat. and Trademark Off. Bd. of Pat. App. & Interferences 1990)  
 ..... 13

Ex parte Obukowicz

27 USPQ2d 1063, 1065 (U.S. Pat. and Trademark Off. Bd. of Pat. App. & Interferences 1993)  
 ..... 11

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Manual of Patent Examining Procedure (MPEP) §2141 ..... 17

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(citing In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991))..... 10

Manual of Patent Examining Procedure (MPEP) §2143.01

(citing, In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990))..... 12, 19

Modern Dictionary of Electronics 10 (1999 7th ed. by Graf).....	24, 25
Modern Dictionary of Electronics 542 (1999 7th ed. by Graf).....	24, 25
The American Heritage Dictionary Based on the New Second College Edition (Houghton Mifflin Company, 1983).....	46
Webster's College Dictionary 796 (Robert B. Costello et al. eds., 1991).....	46
Webster's New Ideal Dictionary 431 (Merriam-Webster, Inc., 1989).....	45
Webster's Third New International Dictionary of the English Language Unabridged 1327 (Philip B. Gove et al. eds., 1986) .....	45



## STATUS OF CLAIMS

Claims 1-81 are pending in the subject patent application. Pending claims 1-10, 12-13, 16-20, 22-26, 29-31, 33-34, 43-47, 49-53, 55-60, 62-63, 66-69, and 71-81 stand rejected and are being appealed on the grounds further explained hereinafter. Claims 36-42 are allowed, and dependent claims 21, 48, 54, and 64-65 are allowable -- only being subject to an objection as to form. In addition, dependent claims 11, 14-15, 27-28, 32, 35, 61, and 70 are newly indicated to be allowable in the Examiner's Answer, and are also only subject to an objection as to form.



## GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claims 1 and 7 are rejected under 35 USC §102(a) as being anticipated by U.S. Patent No. 5,815,090 to Su (Su).
- B. Claim 68 is rejected under 35 USC §103(a) as being unpatentable over Su.
- C. Claims 2-3, 8-10, 12-13, 29-30, 33-34, 56, 59-60, and 69 appear to be rejected under 35 USC §103(a) as being unpatentable over Su in view of U.S. Patent No. 3,836,842 to Zimmermann et al. (Zimmermann), which is a modified ground of rejection from the Examiner's Answer. For this ground of rejection, it is believed the Examiner's Answer inadvertently substituted U.S. Patent No. 5,764,138 to Lowe (Lowe) for the Zimmerman reference in the introductory statement in item 3 on page 4 because application of the Lowe reference is inconsistent with the balance of the document.
- D. Claims 4-6, 16-20, 22-26, 43-47, 49, 53, 56-58, 62-63, 66-67, and 71-81 appear to be rejected under 35 USC §103(a) as being unpatentable over Su in view of Lowe, which is a modified ground of rejection from the Examiner's Answer. The introductory claim listing for this ground in item 4 on page 7 of the Examiner's Answer did not include claims 26 and 71-76 as listed above; however, the accompanying explanation in the Examiner's Answer for this ground of rejection does explicitly refer to these claims. The Reply Brief has been prepared based on this understanding.
- E. Claims 31 is rejected under 35 USC §103(a) as being unpatentable over Su in view of Lowe and Zimmermann, which is a modified ground of rejection in the Examiner's Answer.

F. Claims 50-53 and 55 are rejected under 35 USC §103(a) as being unpatentable over Su in view of Lowe and U.S. Patent No. 6,178,834 to Allen et al. (Allen), which is a modified ground of rejection in the Examiner's Answer.



## ARGUMENTS

All rejections remain under 35 USC §102 or 35 USC §103, as modified in the Examiner's Answer.

### **A. Claims 1 and 7 Are Novel Over Su.**

#### **1. Prior Rationale is Maintained.**

The arguments set forth in the Appeal Brief filed 14 June 2004 to establish novelty of claims 1 and 7 over Su are hereby incorporated by reference.

#### **2. Reply to the Response to Argument in the Examiner's Answer.**

It is respectfully submitted that the Applicant has specifically pointed-out in ample detail that "locating the pest control device after installation by receiving a wireless transmission..." are among the features of claim 1 that are not disclosed, taught, or suggested by Su. Such features include "finding" as asserted in the Examiner's Answer as well as the other meanings per the various applicable dictionary definitions provided in Appendix B. The Examiner's Answer appears to boost reliance on the graph of Su's Fig. 7 to explain that the "wireless" embodiment of Su is being used to perform "locating" as set forth in claim 1. To the contrary, the Fig. 7 graph of experimental data was developed with a "wired" experimental prototype involving the application of a 2500 millivolt (mV) line voltage to test circuit continuity (Su, col.

6, line 42 - col. 7, line 13), and is completely isolated from the "wireless" embodiment of Su (See, Fig. 3). This wired prototype does not disclose "locating" giving such term the proper meaning as explained in connection with the Appeal Brief. Instead, at most it merely determines if a given device is present or not -- and is ambiguous at that because a detected open circuit condition of the "wired" type of monitoring station could occur due to termites or because the station has been moved to a different location.

Moreover, even assuming *arguendo* that the prototype embodiment of Fig. 7 does disclose the locating features of claim 1, there is no disclosure regarding how such features might be practiced with or adapted to the wireless embodiment. The claims must not be treated as "mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims and that give the claims their meaning." Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al., 730 F.2d 1452, 1459, 221 USPQ 481, 486 (Fed. Cir. 1984). In the instant case, the Examiner's Answer continues to cherry-pick the various disconnected embodiments of Su. Accordingly, anticipation of claim 1 is improperly founded on treatment of the Su reference as a "mere catalog of parts."

## **B. Dependent Claim 68 Is Nonobvious Over Su.**

The arguments set forth in the Appeal Brief filed 14 June 2004 to establish nonobviousness of claim 68 are hereby incorporated by reference. To summarize, the inclusion of a pesticide in the pest control device as defined in claim 68 is contrary to a primary focus of Su -- *that is* determining termites are present before applying pesticide. Claim 68 is directed to embodiments of a pest control device that is installed with pesticide -- either with or without the

capability to detect pest activity (including, but not limited to termite pests). Moreover, claim 68 is directed to locating this device installed with pesticide by receiving a wireless transmission – a far cry from anything suggested, taught, or otherwise motivated by Su. Indeed, the passage of Su relied upon in the Examiner's Answer further makes this point because the addition of a toxicant delivery device that is added to or fitted around the monitoring device of Su is premised on the contingency: "if a need arises to deliver toxicant." Such contingency reinforces Su's goal of avoiding pesticide usage *until the need arises*. Further, adding or fitting a toxicant delivery device around the monitoring device when such need does arise fails to teach or suggest: installing a pest control device with a pesticide and a wireless communication circuit, and then locating it after installation by receiving a wireless transmission as defined by claim 68. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. See, W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983)). Accordingly, there is no rebuttal of the negative teaching of Su in the Examiner's Answer -- instead this negation is reinforced.

**C. Claims 2-3, 8-10, 12-13, 29-30, 33-34, 56, 59-60, and 69 Are Nonobvious Over Su in View of Zimmermann as Modified in the Examiner's Answer.**

**1. The Combination of Su and Zimmermann Is Improper Under §103.**

It is respectfully submitted that claims 2-3, 8-10, 12-13, 29-30, 33-34, 56, 59-60, and 69 are patentable based on multiple grounds. The seminal case directed to application of 35 USC §103 is Graham v. John Deere, 383 U.S. 1, 17-18, 148 USPQ 459 (1966), from which four familiar factual inquiries have resulted. The first three are directed to prior art evaluation, and

the last is directed to secondary considerations. From these inquiries, the initial burden is on the Examiner to establish a *prima facie* case of obviousness. "First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." Manual of Patent Examining Procedure (MPEP) §2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

The rejection is improper because the requisite suggestion or motivation to combine the Su and Zimmermann references is absent. The rejection of claims based on the Su/Zimmermann combination under §103 appear to rely on combining elements of both Su's wired embodiment (Fig. 7) and wireless embodiment (Fig. 3) as asserted to reject claim 1 under §102. There has been no showing of a suggestion or motivation as to why the Su reference should be modified to combine the wired and wireless embodiments in the manner asserted -- being nothing more than a mere "catalog of parts" previously described in connection with claim 1. Indeed, the suggestion/motivation to combine or modify under §103 needs to be specific. Where a "statement is of a type that gives only general guidance and is not specific as to the particular form of the claimed invention and how to achieve it ... [s]uch a suggestion may make an approach 'obvious to try' but it does not make the invention obvious." *Ex parte Obukowicz*, 27 USPQ2d 1063, 1065 (U.S. Pat. And Trademark Of. Bd. of Pat. App. & Interferences 1993) (citations omitted).

Besides the impropriety of asserting a Su modification that combines the Fig. 3 and Fig. 7 embodiments, the combination of Su and Zimmerman is also flawed. "The mere fact that the prior art

may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d, 1783-84 (Fed. Cir. 1992) (holding that a combination of references does not render a claim obvious due to a lack of suggestion or motivation to combine or modify). As a corollary, the patent office has recognized that "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." MPEP §2143.01. MPEP §2143.01 also states that "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious."

Congruent with Su's goal of applying pesticide only when needed, a further goal of Su is to reduce, if not eliminate, on-site manual inspections through remote monitoring operations (Su, col. 1, lines 11-21; col. 2, lines 15-30). Accordingly, in the Su reference, a data collection unit gathers sensor data from distributed monitoring stations for transmittal to a remote facility. In contrast, the Zimmerman reference is directed to a portable interrogating instrument, and relies on manual, on-site operation with no ability to store information or remotely communicate it – merely providing an operator an audible signal relating to marker depth, if anything. Zimmermann's manually intensive operation is inapposite to the remote, automated sensing approach of Su. The Zimmermann device involves a rather complicated protocol of directional movements to determine marker depth (see cols. 13 and 14 generally) -- which is also inconsistent with reduced operator involvement. Indeed, why would one undermine the intended remote monitoring operation of the Su system by modifying it to include a manual, one-device-at-a-time reader from the Zimmermann reference? It is respectfully submitted that to do so defeats the intended purpose and operating principles of Su. Accordingly, the

requisite suggestion/motivation required by §103 is absent. Indeed, the prospects for a successful outcome from the asserted Su/Zimmermann combination would be highly speculative at best -- failing to impart a reasonable expectation of success as required to sustain obviousness.

## **2. Additional Reasons Common to Claims 2, 3, 34, 56, 59, and 60 Support Patentability Over the Asserted Su/Zimmermann Combination.**

The features of claim 2 include a plurality of pest control devices that each include a passive RF transmitter configured to *transmit a unique identifier* in response to an interrogation signal. As in prior office actions, the last paragraph on page 4 of the Examiner's Answer maintains that the wireless monitoring devices of Su are uniquely identified because "unique identification for the sensors are inherent in order to distinguish the plurality of sensors according to Figs. 3 and 7 . . ." (emphasis added). This contention is contrary to the law regarding inherency. Specifically, for an element to be inherently disclosed, it must "necessarily be present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citing Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991)). Indeed, inherency "may not be established by probabilities or possibilities . . . The mere fact that a certain thing may result from a given set of circumstances is not sufficient." Robertson, 169 F.3d at 745. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (U.S. Pat. and Trademark Off. Bd. of Pat. App. & Interferences 1990) (emphasis in the original). In other words, in order to be inherent, the asserted features must be a necessary

consequence of the reference teachings. Accordingly, any alternatives to Su's operative dependence on the use of unique identifiers defeat inherency.

There are a number of ways that Su's "wireless links" can operate that do not include the ability to transmit a unique identifier. For example, Su's data collection device could be arranged to initiate communication with each different monitoring station by broadcasting a different address specific to a given station and listening for a response from such station. Alternatively, the monitoring stations need not be configured to respond to an interrogation signal at all. Thus, in another example the different monitoring stations could be synchronized to send data to a collection device in different station-specific time slots, which the collection device is able to correlate to the different stations without use of any kind of transmitted identifier. These are just a few of examples of the types of protocols for which the monitoring station need not have "a unique identifier" or be configured to transmit such an identifier as defined by claim 2. Consequently, these features are not inherent because they are not a necessarily present in Su.

The Examiner's Answer on page 5, line 7 also asserts that the Zimmermann reference has an "identifying resonant frequency (unique identifier) ..." This reference lacks any teaching or suggestion that the resonant frequency of a single marker is unique -- indicating that for a given user a group of markers operate with the same frequency characteristics.

Dependent claim 3 includes the claim 2 features by virtue of incorporation. The features of dependent claim 34 include a different identification signal to uniquely identify each of two or more pest control devices -- indicating common additional grounds in support of patentability, too. Furthermore, the features of independent claim 56 include interrogating pest control devices with a wireless communication device that receives a plurality of identification signals each corresponding to a different one of the devices, and so these additional grounds support its patentability. Claims 59 and

60 depend from claim 56 incorporating the features thereof and likewise patentability is supported for at least the same reasons. Thus, further reasons support nonobviousness of claims 2, 3, 34, 56, 59, and 60.

**3. Additional Reasons Support Patentability of Claim 69 Over the Asserted Su/Zimmermann Combination.**

The features of claim 69 include a pest control device installed with a bait member including a pesticide and a wireless communication circuit. Such features are contrary to Su's preferred operation; and therefore lack the requisite suggestion/motivation to combine for at least the further reasons explained to support nonobviousness of claim 68 over Su.

**4. Additional Reasons Common to Claims 9, 29, 30, 33, 34, and 58-60 Support Patentability Over the Asserted Su/Zimmermann Combination.**

The features of dependent claim 9 include a hand held interrogator to receive information from a pest control device by wireless transmission (see base claim 8) and transmitting the information to a data collection unit. In other words, claim 9 involves both a hand held interrogator and a data collection device. The inclusion and/or use of both an interrogator and a data collection device, in addition to a pest control device, is antithetical to the teachings of Su and Zimmerman. Both of these references at most only use one data gathering device. As a result, those skilled in the art would be discouraged from including both an interrogator and a data collection device -- especially in view of Su's desire to simply and efficiently provide automated remote data gathering operation.



On page 5, in the last paragraph of the Examiner's Answer, the rejection rationale included "it would have been obvious ... to also transmit the wirelessly collected unique identifiers on the handheld interrogator to the same or different data collection device for purposes such as analysis or record keeping." However, the Zimmermann instrument is only arranged to detect marker presence and output an audible signal to the operator indicative of detection. In fact, the Zimmermann device lacks any capability to store or hold received information -- let alone multiple unique identifiers. Even if the Zimmerman device hypothetically could store information, it lacks any way to transmit such information to a data collection device. These shortcomings of the Zimmermann instrument even further undermine Su's ability to collect monitoring station information. Contrary to the Examiner's Answer, analysis and record keeping with the data collection device is thwarted by the asserted Su/Zimmermann combination.

Comparable features are also included among those recited in claims 29, 30, 33, 34, and 58-60 either directly or through incorporation by reference in a dependent claim preamble. Hence, it is submitted that independent grounds support the patentability of claims 9, 29, 30, 33, 34, and 58-60.

**5. Additional Reasons Common to Claims 2, 3, 13, and 60 Support Patentability Over the Asserted Su/Zimmermann Combination.**

The asserted Su/Zimmermann combination fails to teach or suggest all the features of dependent claims 2, 3, 13, and 60. The features of these claims include locating a pest control device as previously discussed in connection with the §102 rejection of claim 1. To the extent these claims are being rejected based on the same contentions as set forth in the §102 rejection, it is submitted that at least the same reasons make the rejection improper under §103.

Even assuming for the sake of argument that a proper *prima facie* case under §103 exists, there is evidence of secondary factors establishing nonobviousness. "Objective evidence or secondary considerations such as unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, and skepticism of experts are relevant to the issue of obviousness and must be considered in every case in which they are present." MPEP §2141. Graham, 383 U.S. at 17-18.

Such evidence may be found in the instant application as declared to be true by the inventors. For example, the long-felt, yet unmet need to locate pest control devices is indicated on page 1, lines 25-31 of the present application as originally filed, and the solution to this locating problem is described, for instance, on page 10, line 30 - page 11, line 15. Accordingly, even if a *prima facie* case has been established, these secondary factors provide rebuttal – further supporting patentability.

**D. Claims 4-6, 16-20, 22-26, 43-47, 49, 53, 56-58, 62-63, 66-67, and 71-81 Are Nonobvious Over Su in View of Lowe as Modified in the Examiner's Answer.**

**1. Claim Listing Uncertainty.**

The introductory claim listing for this ground in item 4 on page 7 of the Examiner's Answer did not include claims 26 and 71-76 as listed above; however, the accompanying explanation in the Examiner's Answer for this ground of rejection does explicitly refer to claims 26 and 71-76 by number. The Reply Brief has been prepared based on the understanding that claims 26 and 71-76 stand rejected under this ground.

**2. The Combination of Su and Lowe Is Improper Under §103 as to All the Claims Rejected on These Grounds.**

The rejection is improper because the requisite suggestion or motivation to combine is absent. In contrast to Su's desire to reduce/eliminate on-site manual inspections through remote monitoring (Su, col. 1, lines 11-21; col. 2, lines 15-30), the Lowe reference utilizes code reader 20 that *does* appear to require on-site, manual operation. During such manual operation, reader 20 interrogates a device to determine tire pressure. Based on review of the Lowe reference, there does not appear to be any disclosure of the ability to store information in code reader 20 – at least not for more than one interrogation at a time. Furthermore, Lowe lacks any ability to remotely communicate such information. Accordingly, why would one undermine the intended remote monitoring operation of the Su system by modifying it to include a manual, one-device-at-a-time reader from the Lowe reference? It is respectfully submitted that to do so defeats the intended purpose and operating principles of Su. Accordingly, the requisite suggestion/motivation to combine is absent.

The fourth paragraph on page 7 of the Examiner's Answer states that "it would have been obvious ... that a non-specified wireless link [Su's Fig. 3 embodiment] between the pest sensing pest control device and the corresponding wireless receiver [from Lowe?] that is connected by wire to the central data collection unit in Fig. 3 of Su can be implemented by a known configuration such as taught by Lowe." (emphasis added). There is no description of a wireless receiver connected by wire to the central data unit in Su. Interpreting Su's Fig. 3 in this manner is also not taught or suggested -- especially given that this view is merely schematic in nature. Moreover, Lowe fails to cure these deficiencies and an improper standard is being applied to rationalize obviousness. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the

prior art also suggests the desirability of the combination." MPEP §2143.01 (citing, In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)). To the contrary, the asserted Su/Lowe combination is undesirable.

### **3. Additional Reasons Support Patentability of Claims 4-6 Over the Asserted Su/Lowe Combination.**

The asserted Su/Lowe combination fails to teach or suggest all the features of dependent claims 4-6. The features of these claims include locating a pest control device as previously discussed in connection with the §102 rejection of claim 1. To the extent these claims are being rejected based on the same contentions as set forth in the §102 rejection, it is submitted that at least the same reasons make the rejection improper under §103.

Even assuming for the sake of argument that a proper *prima facie* case has been established, there is evidence of secondary factors establishing nonobviousness. "Objective evidence or secondary considerations such as unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, and skepticism of experts are relevant to the issue of obviousness and must be considered in every case in which they are present." MPEP §2141. Graham, 383 U.S. at 17-18.

Such evidence may be found in the instant application as declared to be true by the inventors. For example, the long-felt, yet unmet need to locate pest control devices is indicated on page 1, lines 25-31 of the present application as originally filed, and the solution to this locating problem is described, for instance, on page 10, line 30 - page 11, line 15. Accordingly, even if a *prima facie* case has been established under §103, these secondary factors provide

rebuttal – further supporting patentability. In the case of claimed inventions that further include a pesticide and monitoring circuit/locating features, such secondary considerations are even stronger (see, for example, claims 71, 74, and 80).

**4. Additional Reasons Support Patentability of Claims 24-26 Over the Asserted Su/Lowe Combination.**

The features of dependent claim 24 include at least two pest control devices each including a passive RF communication circuit that is operable to provide a different identification signal for each of the devices. Providing these different identification signals is not inherent in Su for at least the same reasons explained for the rejection of claim 2 with the Su/Zimmermann combination. As a careful review of the Lowe reference reveals, it also fails to teach or suggest the use of unique identifiers for each of a group of objects. Instead, it describes an ID code generally, leaving open the possibility that the transmitted ID code may be the same among a number of like objects. For example, a common ID code could be used for multiple tires of the same model type. Such alternatives belie inherency.

Dependent claims 25 and 26 include the features of claim 24 by virtue of incorporation and are patentable for at least the same additional reasons. Thus, further reasons support nonobviousness of claims 24-26.

**5. Additional Reasons Support Patentability of Claims 6, 45, and 58 Over the Asserted Su/Lowe Combination.**

The features of dependent claim 6 include transmitting information about the pest control device from the interrogator to a data collection device. Thus, the method of claim 6 not only involves an interrogator, but also a data collection device. These features are further patentable for at least the reasons set-forth as additional reasons supporting patentability of claims 9, 29, 30, 33, 34, 59, and 60 in connection with the Su/Zimmerman rejection; where the Zimmermann instrument is being applied in a manner analogous to the card reader of Lowe. Indeed, the inclusion and/or use of both an interrogator and a data collection device, in addition to a pest control device, is antithetical to the teachings of Su and Lowe. These references at most only use one data gathering device. As a result, those skilled in the art would be discouraged from including both an interrogator and a data collection device -- especially in view of Su's desire to simply and efficiently automate remote data gathering operations. Comparable features are also included in claims 45 and 58 either directly or through incorporation by reference in a dependent claim preamble. Thus, several reasons further support patentability of claims 6, 45, and 58.

**6. Additional Reasons Support Patentability of Claim 47 Over the Asserted Su/Lowe Combination.**

The features of dependent claim 47 comprise at least one pest control device including a sensor to measure at least one of temperature, humidity, and barometric pressure in addition to a member to sense at least one species of pest as recited in the corresponding independent claim 43. Su fails to

teach or suggest the use of both this sensing member and this sensor at the same time. The Examiner's Answer relies on col. 7, lines 26-35 of Su, which is reproduced as follows:

Although the sensors described herein for the remote monitoring system are designed to use circuit interruption to detect the presence of termites, other sensors such as moisture meters strategically placed in structural wood to detect potential moisture problem, acoustic emission devices to detect feeding activity of other wood destroying insects such as drywood termites, powderpost beetles, wood borers, or a miniature digital balance for measuring weight loss of cockroach or ant bait stations, may be used in accordance with the present invention.

Notably, in this passage the moisture meter is placed in structural wood, and the other sensors appear to be external to the bait station as well. Moreover, this description appears to be in terms of alternatives, not additions to the circuit interruption type of sensor. Indeed, there is no teaching or suggestion to include two different sensor types in the same device as defined by claim 47. Even if multiple sensors are taught in Su, no manner of communicating multiple sensor information is taught or suggested -- especially in view of the bare, single-sentence description of Su's wireless embodiment. Perhaps recognizing these shortcomings, the Examiner's Answer justifies the rejection by stating it would be obvious as a "confirmation measure ensuring detection of termites." However, this suggestion is not in either reference, and tends to contravene Su's approach of using different sensor types in the alternative. Accordingly, the invention of claim 47 is further discouraged in view of the reference teachings -- providing further proof of nonobviousness.

**7. Additional Reasons Support Patentability of Claims 71, 74, and 80 Over the Asserted Su/Lowe Combination.**

The features of claims 71, 74, and 80 include a pest control device installed with a bait or bait member including a pesticide, and a communication circuit or transponder. Such features are contrary

to Su's preferred operation; and therefore lack the requisite suggestion/motivation to combine for at least the further reasons previously explained to support nonobviousness of claim 68 over Su.

**E. Dependent Claim 31 Is Nonobvious Over Su in View of Lowe and Zimmerman as Modified in the Examiner's Answer.**

The flaws of the Su/Zimmermann and the Su/Lowe combinations also undermine the propriety of the rejection of claim 31 based on the asserted combination of Su, Lowe, and Zimmerman. Furthermore, to the extent the respective base claim is patentable, dependent claims 31 is likewise patentable. Besides these grounds, additional reasons also support patentability of claim 31.

Claim 31 depends from claim 30, which depends from independent claim 29. Collectively, the features of claim 31 include a plurality of pest control devices that each include a wireless communication circuit, a hand-held interrogator, a data collection unit, in which the wireless communication circuit of each pest control device includes a passive RF transponder and an active RF communication circuit. In connection with this rejection, the Examiner's Answer reinterprets "passive" and "active" relative to past rejections. In doing so, the Examiner's Answer states in the last paragraph on page 15 that "'active circuitry' or 'active transponder/transmitter/receiver' ... have been known in the art to mean 'circuitry or transponder/transmitter/receiver having active circuit components, such as IC chip components, transistors, etc.', and 'passive circuitry' or 'passive transponder/transmitter/receiver' have been known in the art to mean the transponder/transmitter/receiver does not respond until being interrogated, or having passive components including inductors and/or capacitors, among other meanings." It is submitted that these definitions have confused the meaning of the terms -- especially in relation to each other.



As used in electronics, the terms "passive" and "active" are modifiers of objects in a manner that is generally regarded as mutually exclusive. In other words a component that is passive cannot also be active and visa versa. In fact, the terms "passive component" and "active component" have specific meaning:

**Passive Component:** 1. A nonpowered component generally presenting some loss (expressed in decibels) to a system. 2. A component that has no gain characteristics, such as a capacitor or a resistor. 3. An electrical component without gain or current-switching capability. Commonly used when referring to resistors, capacitors, and inductors. *Modern Dictionary of Electronics* 542 (1999 7th ed. by Graf).

**Active Component:** 1. Those components in a circuit that have gain, or direct current flow, such as SCRs, transistors, thyristors, or tunnel diodes. They change the basic character of an applied electrical signal by rectification, amplification, switching, and so forth. (Passive elements like inductors, capacitors, and resistors have no gain characteristics.) 2. A device, the output of which is dependent on a source of power other than the main input signal. 3. A device capable of some dynamic function (such as amplification, oscillation, signal control) and which usually requires an external power supply for its operation.) 4. Broadly, any device (including electromechanical relays) that can switch (or amplify) by application of low-level signals. *Modern Dictionary of Electronics* 10 (1999 7th ed. by Graf).

Besides components, "passive" and "active" are used to modify other electronic device types. As general modifiers, these terms have been defined:

**Passive:** 1. An inert component that may control, but does not create or amplify, energy. 2. Pertaining to a general class of device that operates on signal power alone. 3. Incapable of generating power or amplification. A nonpowered device that generally presents some loss to a system. 4. Describing a device that does not contribute energy to the signal it passes. *Modern Dictionary of Electronics* 542 (1999 7th ed. by Graf).

Active: 1. Controlling power from a separate supply. 2. Requiring a power supply separate from the controls. 3. Containing, or connected to and using, a source of energy. Modern Dictionary of Electronics 10 (1999 7th ed. by Graf).

As can be observed, these modifiers describe functionality of the object being modified in mutually exclusive terms. In correspondence, the "passive component" and "active component" definitions can be considered special cases of the more general modifiers.

Because of the mutually exclusive nature of these terms, when applied to a device as in "passive transponder" such device cannot also be an "active transponder" giving such terms their broadest reasonable meaning. Thus, while a "passive transponder" can include one or more "active components," it is improper to identify the "passive transponder" as also an "active transponder" on this basis. Instead, it is a passive transponder with one or more active components. Furthermore, the converse conclusion applies as to an "active device" that has one or more "passive components." The embodiments described in the present application are consistent with these meanings. By way of nonlimiting example, see the embodiments described in connection with Fig. 9 of the present application.

Furthermore, usage of this terminology in the asserted references is consistent with this understanding. For example, in column 1, lines 12-30, Lowe states:

The assignee of the present invention develops and manufactures radio frequency (RF) identification systems that include a **passive-type identification tag** and an ID code reader. The **passive-type identification (ID) tag** comprises an RF transponder includes an antenna and is placed on an item that is to be monitored. The RF transponder contains an ID code and other static information or data relating to the item that is to be monitored. The ID code reader comprises an exciter and RF transmit antenna and a receiver and RF receive antenna. The ID code reader queries the identification tag using a transmitted RF signal generated by the exciter. The **transponder chip** responds to the transmitted RF signal or query from

the exciter and an ID code or static data is read out of the transponder chip by way of the RF antenna coupled thereto. The ID code reader receives the ID code and/or data from the **transponder chip** and processes the information to provide relevant information to a user about the item that is tagged.

(emphasis added). Specifically, Lowe refers to "a passive-type identification tag" as one that includes a "transponder chip," where "chip" is commonly understood to be an "active component" type. In fact, the Examiner's Answer identifies an "IC chip" as being an active component type. See, Examiner's Answer, page 15, last paragraph. In another example, consider column 2, lines 27-49 of Zimmerman:

**Passive marking devices**, such as iron rods or permanent magnets, have been considered as a solution to this problem. Iron rods or permanent magnets can be placed with buried facilities and thus be detected by the magnetic anomalies associated with them. One major disadvantage is that there are magnetic anomalies, of varying degrees, associated with at least all ferrous items. It is impossible, in some circumstances, to determine whether or not a magnetic anomaly is evidence of a prior placed marker or merely evidence of a randomly buried item of ferrous content.

**Active devices** have also been considered. One such device might be in the form of an **active transponder**. An **active transponder**, however, would require some external power source, be it a remote source directly wired to it or some means for power conversion of radiated energy from another energy source. A directly wired source is exorbitantly expensive in conductor cost alone. Alternately, it appears that a power conversion means would be of doubtful utility or of high cost or both. It is thus doubtful that an active transponder could be economically made to function satisfactorily.

(emphasis added). Moreover, as this passage demonstrates, Zimmermann leads away from active transponder-based markers. Therefore, with the proper meaning in mind, the Su, Lowe, and Zimmermann references fail to collectively or individually teach or suggest a plurality of pest control

devices that each include a wireless communication circuit with a passive RF transponder and an active RF communication circuit as defined in claim 31. Accordingly, it is believed that numerous grounds support the patentability of claim 31.

**F. Claims 50-53 and 55 Are Nonobvious Over Su in View of Lowe and Allen as Modified in the Examiner's Answer.**

In the Examiner's Answer, the ground of rejection remains the same as the prior rejection as to claims 50-52 and 55 -- differing only in the application of the same ground to reject claim 53. Accordingly, the arguments set forth in the Appeal Brief to establish patentability of these claims are hereby incorporated by reference. Furthermore, the flaws of the combination of Su and Lowe also infect the propriety of the rejection of claims 50-53 and 55. Alternatively or additionally, the patentability of the respective base claim also supports patentability of dependent claims 51-53 and 55.

The features of independent claim 50 include at least one pest control device including both a pest sensor and an environmental sensor. Considered collectively or separately, none of the references suggest using multiple sensors as defined in claim 50. The passage relied upon in the Examiner's Answer for these features is found in Su at column 7, lines 26-35, which is reproduced as follows:

Although the sensors described herein for the remote monitoring system are designed to use circuit interruption to detect the presence of termites, other sensors such as moisture meters strategically placed in structural wood to detect potential moisture problem, acoustic emission devices to detect feeding activity of other wood destroying insects such as drywood termites, powderpost beetles, wood borers, or a miniature digital balance for measuring weight loss of cockroach or ant bait stations, may be used in accordance with the present invention.

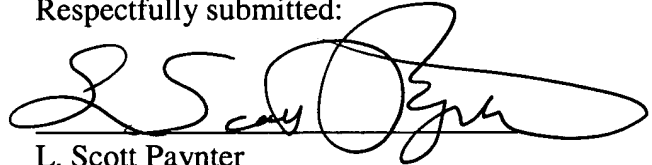
Notably, in this passage the moisture meter (humidity sensor ?) mentioned in the Examiner's Answer is placed in structural wood, and the other sensors appear to be external to the bait station as well. Moreover, this description appears to be in terms of alternatives, not additions to the circuit interruption type of sensor. Indeed, there is no teaching or suggestion to include two different sensor types in the same device as defined by claim 50.

Claim 52 depends from claim 51, which depends from claim 50. The features of claim 52 further include an interrogator and a data collection unit. Thus, in addition to the grounds supporting nonobviousness of base claim 50, further grounds support the patentability of this combination of features as explained in connection with additional arguments in favor of claims 6, 45, and 58 rejected with the Su/Lowe combination. Claim 53 depends from claim 50 reciting that the circuit of the pest control device defines an active RF transmitter/receiver -- such features are also not taught or suggested as previously explained in connection with the rejection of claim 31 based on the Su/Lowe/Zimmermann combination. Consequently, it is respectfully submitted that claims 50-53 and 55 are nonobvious based on numerous alternative grounds.

## CONCLUSION

The Su reference does not teach all the limitations of the present invention disclosed in claims 1 or 7, and further Su, alone or in combination with any other references, does not render any of the claimed inventions obvious. Further, the assertion of the Su/Zimmermann combination and the Su/Lowe combination are intrinsically flawed. The modification of the Su/Lowe combination with one or more of the other asserted references (Zimmerman or Allen) does not cure the underlying deficiencies of the Su/Lowe rejection, and are further flawed based on independent grounds as previously explained. Moreover, additional claim-specific reasons independently support patentability of many of the claims. Therefore, reversal of the rejection is hereby requested.

Respectfully submitted:



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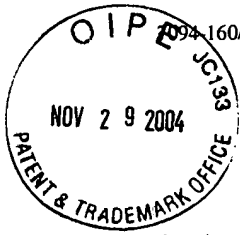
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## APPENDIX A

1. A method, comprising:  
  
installing a pest control device including a communication circuit; and  
  
locating the pest control device after installation by receiving a wireless transmission from the pest control device.
2. The method of claim 1, wherein the pest control device is one of a plurality of pest control devices placed at least partially in the ground about a building during said installing, the pest control devices each including a passive RF transmitter configured to transmit a unique identifier in response to an interrogation signal from a hand-held interrogator.
3. The method of claim 2, wherein the pest control device is installed at least partially below ground and further comprising servicing the pest control device after said locating.
4. The method of claim 1, wherein said locating includes sending an interrogation signal to the transmitter of the pest control device with an interrogator and receiving an identification signal from the pest control device in response to the interrogation signal.
5. The method of claim 4, wherein the pest control device includes a bait member and further comprising receiving a bait status signal in response to the interrogation signal.

6. The method of claim 5, further comprising transmitting information about the pest control device from the interrogator to a data collection device.

7. The method of claim 1, wherein said pest control device is provided with a monitoring bait during said installing and further comprising detecting at least partial consumption of the monitoring bait and installing a pesticide bait in response to said detecting.

8. A method, comprising:

installing a plurality of pest control devices each including a wireless communication circuit;

positioning a hand held interrogator to receive information from a first one of the pest control devices by wireless transmission; and

changing position of the hand held interrogator to receive information from a second one of the pest control devices by wireless transmission, the second one of the pest control devices being spaced apart from the first one of the pest control devices.

9. The method of claim 8, further comprising transmitting the information from the first one of the pest control devices and the information from the second one of the pest control devices to a data collection unit.

10. The method of claim 8, further comprising repositioning the interrogator to communicate with a third one of the pest control devices.



11. The method of claim 8, wherein the information from the first one of the pest control devices includes a pest control device identifier and a bait status indication.

12. The method of claim 8, wherein the wireless communication circuit of at least one of the pest control devices includes a passive RF transmitter.

13. The method of claim 8, wherein said installing includes placing at least one of the pest control devices at least partially below ground and further comprising locating the pest control devices through wireless communication with the interrogator.

14. The method of claim 8, wherein said installing includes placing the first one of the pest control devices at least partially below ground, the first one of the pest control devices being installed with a monitoring bait member for termites, and further comprising:

detecting at least partial consumption of the monitoring bait member from the information about the first one of the pest control devices obtained with the interrogator; and  
installing a pesticide bait member for termites in response to said detecting.

15. The method of claim 8, wherein the pest control devices each include an edible bait member for one or more species of pest, and further comprising evaluating bait status information obtained from each of the pest control devices with the interrogator to identify which of the pest control devices have attracted the one or more species of pest.

16. A pest control device, comprising: at least one bait member operable to be consumed or displaced by one or more species of pest and a passive RF communication circuit responsive to a wireless stimulation signal to transmit information about said pest control device.

17. The device of claim 16, further comprising an active RF circuit.

18. The device of claim 16, wherein said passive RF circuit is operable to include a unique identification signal in said information, said identification signal corresponding to a discrete, multibit code assigned to the pest control device.

19. The device of claim 16, further comprising an electrically conductive loop coupled to said passive RF communication circuit, said loop being arranged to be altered during consumption or displacement of said bait member to provide a status signal having a first state indicating said loop is electrically closed and a second state indicating said loop is electrically open.

20. The device of claim 16, further comprising a housing containing said bait member and said passive RF communication circuit.

21. The device of claim 16, wherein said bait member includes a magnetic material to provide a magnetic signature corresponding to consumption of said bait member by one or more pests.

22. The device of claim 16, further comprising a sensor for measuring a change in at least one of temperature, humidity, or barometric pressure.

23. A combination, comprising: at least two pest control devices each arranged to be spaced apart from one another in an area to be protected from one or more pests, said pest control devices each including a passive RF communication circuit responsive to a stimulation signal.

24. The combination of claim 23, wherein said passive RF communication circuit is operable to provide a different identification signal for each of said pest control devices.

25. The combination of claim 24, wherein at least one of said pest control devices includes a pest sensor operable to provide a status signal indicative of consumption or displacement of a member by the one or more pests.

26. The combination of claim 25, further comprising an interrogator operable to output said stimulation signal and receive data corresponding to said different identification signal and said status signal in response to said stimulation signal.

27. The combination of claim 26, wherein said interrogator is in a hand-held form operable to locate each of said pest control devices by wireless transmission.

28. The combination of claim 27, further comprising a data collection unit operable to receive said data from said interrogator.

29. A system, comprising:

A plurality of pest control devices, two or more of said pest control devices each including a wireless communication circuit, said devices being arranged for independent installation to protect a selected area from one or more species of pest;

a hand held interrogator operable to establish wireless communication with each of said two or more pest control devices individually, said communication between said interrogator and a respective one of said two or more pest control devices being selectable in accordance with position of said interrogator relative to said two or more pest control devices; and

a data collection unit operable to receive information from said interrogator about one or more of said pest control devices.

30. The system of claim 29, wherein said wireless communication circuit includes a passive RF transponder energized by a stimulation signal from said interrogator.

31. The system of claim 30, wherein said wireless communication circuit includes an active RF communication circuit.

32. The system of claim 29, wherein at least one of said pest control devices includes a bait, said bait including a magnetic material.

33. The system of claim 29, wherein at least one of said pest control devices includes an environmental sensor.

34. The system of claim 29, wherein said wireless communication circuit for each of said two or more pest control devices is operable to transmit a different identification signal to uniquely identify each of said two or more pest control devices in response to a signal from said interrogator.

35. The system of claim 29, wherein said pest control devices each include said wireless communication circuit, a bait member for said one or more species of pest, and an electrically conductive pest detection loop coupled to said wireless communication circuit, said pest detection loop being arranged to be altered by said one or more species of pest to provide a pest detection signal through said wireless communication circuit in response to a signal from said interrogator.

36. A system, comprising: at least one pest control device including a pest sensing member, said member including a magnetic material, said magnetic material providing a magnetic field that changes in response to removal of said magnetic material from said member by one or more pests, said at least one pest control device further including a circuit operable to generate a signal corresponding to said magnetic field.

37. The system of claim 36, wherein said circuit is further configured for wireless communication.

38. The system of claim 37, further comprising a device operable to receive information transmitted by said wireless communication.

39. The system of claim 38, wherein said circuit includes at least one magnetoresistor.
40. The system of claim 36, wherein said pest sensing member is configured as a bait including said magnetic material and said monitoring signal corresponds to a magnetic signature that changes as said bait is consumed.
41. The system of claim 36, wherein said at least one pest control device further includes a sensor to measure at least one of temperature, humidity, and barometric pressure.
42. The system of claim 36, wherein said at least one pest control device is a plurality.
43. A system, comprising: at least one pest control device including a member to sense at least one species of pest and a communication circuit, said communication circuit being operable to transmit a device identification code and pest detection information.
44. The system of claim 43, further comprising an interrogator operable to generate a stimulation signal and wherein said communication circuit includes a passive RF transmission circuit responsive to said stimulation signal to transmit said device identification code and said pest detection information.
45. The system of claim 44, further comprising a data collection unit operable to receive data from said interrogator.

46. The system of claim 43, wherein said communication circuit includes an active RF transmitter/receiver.

47. The system of claim 43, wherein said at least one pest control device further includes a sensor to measure at least one of temperature, humidity, and barometric pressure.

48. The system of claim 43, wherein said member includes a magnetic material to provide a magnetic signature indicative of a degree of removal of said magnetic material from said member.

49. The system of claim 43, wherein said at least one pest control device is a plurality.

50. A system, comprising: at least one pest control device including a pest sensor, a first environmental sensor, and a circuit operable to communicate information corresponding to a first environmental characteristic detected with said first environmental sensor and pest detection status determined with said pest sensor.

51. The system of claim 50, further comprising an interrogator operable to generate a stimulation signal and wherein said circuit further defines a passive RF transmitter responsive to said stimulation signal to transmit said information.

52. The system of claim 51, further comprising a data collection unit operable to receive data from said interrogator.

53. The system of claim 50, wherein said circuit defines an active RF transmitter/receiver.

54. The system of claim 50, wherein said pest sensor includes a member with a magnetic material to provide a magnetic signature indicative of a degree of removal of said magnetic material from said member.

55. The system of claim 50, wherein said at least one pest control device is a plurality.

56. A method, comprising:

installing a plurality of pest control devices each including a bait for one or more species of pest and a wireless communication circuit; and

interrogating the pest control devices with a wireless communication device, the wireless communication device receiving a plurality of identification signals each corresponding to a different one of the pest control devices during said interrogating.

57. The method of claim 56, further comprising receiving pest activity status information from each of the pest control devices with the wireless communication device.

58. The method of claim 57, further comprising transmitting data to a data collection unit from the wireless communication device.



59. The method of claim 56, wherein the wireless communication device is in the form of a hand-held wireless interrogator.

60. The method of claim 59, further comprising locating each of the pest control devices with the interrogator.

61. The method of claim 59, wherein the wireless communication circuit includes a passive RF transponder responsive to a stimulation signal from the wireless communication device, the passive RF transponder sending a respective one of the identification signals and a status signal indicative of pest activity.

62. The method of claim 56, wherein the pest control devices each include a sensor to measure at least one of temperature, humidity, and barometric pressure.

63. The method of claim 62, further comprising sending data to the wireless communication device from the sensor for each of the pest control devices and comparing the data to pest activity in the pest control devices.

64. The method of claim 56, wherein said bait for at least one of said pest control devices includes a magnetic material operable to provide a magnetic signature corresponding to bait consumption.

65. The method of claim 64, further comprising monitoring said magnetic signature to evaluate pest bait consumption behavior.

66. The method of claim 56, wherein the bait of each of the pest control devices is selected to be edible by subterranean termites and said installing includes placing at least a portion of the pest control devices at least partially below ground.

67. The method of claim 56, wherein the bait for each of the pest control devices is of a pest activity monitoring variety, and further comprising:

detecting at least partial consumption of the bait for at least one of the pest control devices from data obtained with the interrogator; and

installing a pesticide bait member in response to said detecting.

68. The method of claim 1, wherein the pest control device is installed with a bait including a pesticide.

69. The method of claim 8, wherein the first one of the pest control devices is installed with a bait member including a pesticide.

70. The method of claim 15, further comprising predicting future behavior of the one or more species of pest from said evaluating.

71. The device of claim 16, wherein said at least one bait member includes a pesticide.

72. The device of claim 16, wherein said at least one bait member includes a monitoring bait.

73. The method of claim 63, further comprising predicting pest behavior based on said comparing.

74. The method of claim 56, wherein the bait includes a pesticide.

75. A pest control device, comprising: at least one bait member operable to be consumed or displaced by one or more species of pest and an RF transponder responsive to a wireless stimulation signal to transmit information about the pest control device.

76. The device of claim 75, wherein said RF transponder is passive.

77. The device of claim 75, wherein said RF transponder includes an active RF circuit.

78. The device of claim 75, further comprising an electrically conductive loop coupled to said RF transponder, said loop being arranged to be altered during consumption or displacement of said bait member to provide a status signal having a first state indicating said loop is electrically closed and a second state indicating said loop is electrically open.

79. The device of claim 75, wherein said RF transponder is passive and further comprising an active RF communication circuit.

80. The device of claim 75, wherein said at least one bait member includes a pesticide.

81. The device of claim 75, wherein said at least one bait member is of a monitoring type consumable or displaceable by at least one variety of termite.



## APPENDIX B

WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE  
UNABRIDGED 1327 (PHILIP B. GOVE et al. eds., 1986)

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DEC 02 2004

## Locate :

Technology Center 2600

transitive

1. to determine or indicate the place of : define the site or limits of (as by a survey)  
<locating the lines of property>
- 2a. to set or establish in a particular spot or position : STATION <located himself behind the screen> <carefully located the clock in the center of the mantel>
- 2b. to establish in a charge or office
- 3a. to seek out and discover the position of <located the children in the attic> <try to ~ the source of the sound>
- 3b. to find the place of or assign a place to in a sequence <locating the reigns of the pastoral kings>
- 3c. to determine the position of a mathematical object: <~ a decimal point> <~ a point in a plane>
4. *civil law* : to let out by a contract of location

intransitive

to take up one's residence : establish oneself or one's business : SETTLE <the company located north of town>  
*of a Methodist minister* : to retire from clerical life or duties

## 2. WEBSTER'S NEW IDEAL DICTIONARY 431 (MERRIAM-WEBSTER, INC., 1989)

## Locate :

1. STATION : SETTLE
2. to determine the site of
3. to find or fix the place of in a sequence

## 3. WEBSTER'S COLLEGE DICTIONARY 796 (ROBERT B. COSTELLO et al. eds., 1991)

## Locate :

transitive

to identify or discover the place or location of: *to locate a missing book.*  
To establish in a position, situation, or locality; place; settle.

To assign or ascribe a particular location to (something), as by knowledge or opinion:

*Some scholars locate the Garden of Eden in Babylonia.*

To survey and enter a claim to a tract of land; take possession of land.

**RECEIVED**

DEC 02 2004

Technology Center 2600



intransitive

to establish one's business or residence in a place; settle.

**4. THE AMERICAN HERITAGE DICTIONARY BASED ON THE NEW SECOND COLLEGE EDITION (HOUGHTON MIFFLIN COMPANY, 1983)**

**Locate :**

1. to determine the position of
2. to find by searching: *locate the source of error*
3. to situate or place
4. to become established; settle

On another score, it is asserted that "passive" as used in the claim 2 terminology "passive RF transmitter" indicates "transmits only being interrogated [sic], as well as having receive/transmit passive circuit components ..." on page 5, lines 4-5 of the Examiner's Answer. In connection with the rejection of claim 31, the Examiner's Answer contrasts "passive" to "active" stating that "active circuitry" or "active transponder/transmitter/receiver" ... have been known in the art to mean "circuitry or transponder/transmitter/receiver having active circuit components, such as IC chip components, transistors, etc.", and "passive circuitry" or passive transponder/transmitter/receiver" have been known in the art to mean the transponder/transmitter/receiver does not respond until being interrogated, or having passive components including inductors and/or capacitors, among other meanings."